

1	Claim 1. A light distribution device comprising:	1
2	<u>a pair of light transmitting panels joined to form an integral unit</u>	2
3	<u>having a common base portion, each of said lens panels</u> [at least one light	3
4	transmitting lens panel] having a geometric base, a front surface extending	4
5	outwardly from one edge of said base and a rear surface extending outward	5
6	from the opposite edge of said base and inclining toward the outer edge of	6
7	said front surface,	7
8	a recess formed adjacent the base of said lens panel, and	8
9	a light cartridge mounted within said recess in a manner to transmit	9
10	light through said lens panel and to allow said panel to be assembled with	10
11	said base in abutting relation with an adjacent surface	11

1	.Claim 2. The device of Claim 1 wherein:	1
2	at least one surface off said lens panel is jewel-cut.	2

1	Claim 3. The device of Claim 1 wherein :	1
2	said base is rectangular.	2

1	Claim 4. The device of Claim 1 wherein:	1
2	said base is triangular.	2

1	Claim 5. The device of Claim 1 wherein:	1
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2	said rear surface is mirrored.	2
1	Claim 6. The device of Claim 1 wherein:	1
2	said rear surface is darkened.	2
1	Claim 7. The device of Claim 1 wherein:	1
2	said rear surface is granulated.	2
1	Claim 8. The device of Claim 1 wherein:	1
2	said rear surface is coated.	2
1	Claim 9. The device of Claim 1 further comprising:	1
2	means external to said light distribution device delivering energy to	2
3	said light cartridge.	3
1	Claim 10. The device of Claim 9 wherein:	1
2	said external means supplies electrical energy to said cartridge.	2
1	Claim 11. The device of Claim 9 wherein:	1
2	said external device supplies non-electric energy to said cartridge.	2
1	Claim 12. The device of Claim 9 wherein:	1

2	said external device supplies optical energy to said cartridge.	2
1	Claim 13. The device of Claim 1 further comprising:	1
2	means for controlling the amount of infrared radiation emitted by	2
3	said light panels.	3
1	Claim 14. The device of Claim 1 wherein:	1
2	said front surface is flat.	2
1	Claim 15. The device of Claim 1 wherein:	1
2	said front surfaced is convex.	2
1	Claim 16. The device of Claim 1 wherein:	1
2	said front surface is concave.	2
1	Claim 17. The device of Claim 1 wherein:	1
2	said front surface is carved.	2
1	Claim 18. The device of Claim 1 wherein:	1
2	said front surface is textured.	2
1	Claim 19. The device of Claim 1 wherein:	1

2	said front surface is etched.	2
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1	Claim 21. The device of Claim 1 wherein:	1
2	said front surface is sculpted.	2

1	Claim 22. The device of Claim 1 wherein:	1
2	said front surface has material applied thereto to form letters.	2

1	Claim 23. The device of Claim 1 wherein:	1
2	said front surface has material applied thereto to modify the light	2
3	transmitted from said front surface.	3

1	Claim 24. The device of Claim 1 wherein:	1
2	said lens panel contains a hollow portion.	2

1	Claim 25. The device of Claim 24 wherein:	1
2	said hollow portion of said lens panel is filled with fluid.	2

1	Claim 32. The device of Claim 1 wherein:	1
2	said cartridge includes light modifying means.	2
1	Claim 33. The device of Claim 32 wherein:	1
2	said light modifying means is a photomultiplier.	2
1	Claim 34. The device of Claim 32 wherein:	1
2	said light modifying means is a filter.	2
1	Claim 35. The device of Claim 32 wherein:	1
2	said cartridge contains a filter to pass only desired light frequencies	2
3	to said lens panel, and	3
4	a substance to be purified by said ultraviolet light is passed through	4
5	said hollow portion of said lens panel.	5
1	Claim 36. The device of Claim 34 wherein:	1
2	said filter serves to control the amount of infrared light passed to	2
3	said light panels.	3
1	Claim 37. The device of Claim 1 wherein:	1
2	said device is mounted on the framing studs of a building to form a	2
3	floor panel for a room within said building.	3

1 Claim 38. The device of Claim 1 wherein: 1
2 said device is mounted on the framing studs of a building to form a 2
3 wall panel for a room within said building. 3

1 Claim 39. The device of Claim 1 wherein: 1
2 said device is mounted on the framing studs of a building to form a 2
3 ceiling panel for a room within said building. 3

1 Claim 40. The device of Claim 1 wherein: 1
2 said device is embedded in the ground to form a section of a 2
3 sidewalk. 3

1 Claim 41. The device of Claim 1 wherein: 1
2 said device is embedded in the ground to form a section of a road. 2

1 Claim 42. An article of furniture comprising: 1
2 at least one light distribution device having a pair of [at least one] 2
3 light transmitting lens panel having a base, a front surface extending out- 3
4 wardly from one edge of said base and a rear surface extending outwardly 4
5 from the opposite edge of said base and inclining toward the outer edge of 5
6 said front surface, and one of said lens panels formed with a recess adjacent 6
7 said base, and 7

a light cartridge mounted in said recess to transmit light through
said lens panel.

1	Claim 43. The device of Claim 1 wherein:	1
2	said lens panel is arcuate.	2

1	Claim 44. The device of Claim 1 wherein:	1
2	said device is mounted under water.	2

1	Claim 45. The device of Claim 1 wherein:	1
2	said device is mounted in an explosive atmosphere.	2

1	Claim 46. The device of Claim 1 wherein:	1
2	said device serves to regulate the temperature of the surrounding	2
3	area.	3

1	Claim 47. The device of Claim 1 wherein:	1
2	said device serves as a sign.	2

1 Claim 48. The device of Claim 32 wherein ; 1

2 said light modifying means projects images into said lens panel. 2

1 Claim 49. The device of Claim 48 wherein: 1
2 said light modifying means is a television projection system 2

1 Claim 50. (Cancelled) The device of Claim 1 further comprising: 1
2 a pair of said lens panels joined to form an integral unit having a 2
3 common base portion, with rear surfaces projecting outwardly and 3
4 forwardly from respective sides of said base portion and a front surface 4
5 connecting the forward ends of said rear surfaces with a recess formed in 5
6 said base portion, and 6
7 a light cartridge insertable into said recess to illuminate said lens 7
8 panels. 8

1 Claim 51. A light-emitting structure including: 1
2 at least two lens panels, each of said lens panels comprising: 2
3 a geometric base, a front surface extending outwardly from one 3
4 edge of said base and a rear surface extending outward from the opposite 4
5 edge of said base and inclining toward the outer edge of said front surface;5
6 said lens panels being mounted in base to base relation; and 6
7 a light cartridge connecting said bases and serving to deliver light 7
8 through said lens panels. 8